What is claimed is:

1. A system for determining the tire load of a vehicle comprising:

a first device disposed in a tire of a vehicle and producing a signal that is a function of a tire contact time period, during which a point at the tire circumference stays in contact with the ground; and

a second device operative to repetitively perform a first task of processing the signal to calculate the tire contact time period at a first predetermined rate, and to repetitively perform a second task of calculating a tire load based at least in part upon the calculated tire contact time period at a second predetermined rate;

wherein said second predetermined rate is less than said first predetermined rate.

2. The system of Claim 1 wherein the first device includes an accelerometer.

3. The system of Claim 2 where in the second device includes a single microprocessor.

4. The system of Claim 3 where in the microprocessor is disposed in the tire.

5. The system of Claim 2 wherein the second device includes at least a first microprocessor and a second microprocessor.

6. The system of Claim 5 wherein the first microprocessor is operative to perform the first task and the second microprocessor is operative to perform the second task.

7. The system of Claim 6 wherein the two microprocessors run asynchronously.

8. The system of Claim 7 wherein the first microprocessor disposed in the tire.

9. The system of Claim 8 wherein the two microprocessors are capable of two-way communications.

10. A method of processing data for determining tire load of a vehicle comprising the steps of:

a) detecting from a signal a pulse that is a function of tire contact time;

b) performing one of a first task of calculating tire load based at least in part upon the pulse detected and a second task of updating at least one of a frequency of a signal filter and an expected pulse amplitude of the signal; and

c) performing the other of the first task and the second task;

wherein the steps are performed asequentially.

11. The method of claim 10 wherein step a) is performed based in part upon the filter frequency and/or the expected pulse amplitude updated in step b).

12. A method of processing data for determining a load on a tire of a vehicle comprising the steps of:

a) detecting from a signal a pulse that is a function of tire contact time; and

b) calculating a tire load based at least in part upon the pulse detected;

wherein step b) is occurring at a rate slower than the rate at which step a) is occurring.

13. The method of Claim 12 wherein steps a) and b) are executed in a single microprocessor.

14. The method of Claim 13 wherein the single microprocessor is disposed in the tire.

15. The method of Claim 12 wherein step a) is executed in a first microprocessor and step b) is executed in a second microprocessor.

16. The method of Claim 15 wherein step a) and step b) are executed asynchronously.

17. The method of Claim 16 wherein the first microprocessor is disposed in the tire.